

CLAIMS

1. A culture treatment apparatus comprising:

5 a treatment section for applying predetermined treatment to cells stored in an openable container for an automatic culture apparatus in a partitioned space;

a detection section for detecting a predetermined state of the space, the detection section being in the space or in the vicinity of the space; and

10 a control section for controlling the treatment section to prevent the container in the space from being opened if the detection section detects the predetermined state.

2. A culture treatment apparatus comprising:

15 a treatment section for applying predetermined treatment to cells stored in an openable container for an automatic culture apparatus in a partitioned space;

a detection section for detecting a predetermined state of the space, the detection section being in the space or in the vicinity of the space; and

20 a control section for controlling the treatment section to close the container if the detection section detects the predetermined state with the container opened.

25 3. The culture treatment apparatus according to claim 1 or 2,

wherein the detection section is a cleanliness sensor for detecting whether a degree of cleanliness in the space does not satisfy a predetermined degree of cleanliness.

5 4. The culture treatment apparatus according to claim 3,
further comprising a report section for reporting that the degree
of cleanliness measured with the cleanliness sensor does not
satisfy the predetermined degree of cleanliness, if the degree
of cleanliness measured with the cleanliness sensor does not
10 satisfy the predetermined degree of cleanliness.

5. The culture treatment apparatus according to claim 3,
wherein a plurality of the cleanliness sensors is arranged at
intervals in the space.

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6. The culture treatment apparatus according to claim 3,
wherein the cleanliness sensor is arranged near a location
through which the container passes.

20 7. The culture treatment apparatus according to claim 6,
wherein the cleanliness sensor is arranged on a mounting stage
for holding the container.

8. The culture treatment apparatus according to claim 3,
25 further comprising a display section for displaying the degree

of cleanliness measured with the cleanliness sensor.

9. The culture treatment apparatus according to claim 2, further comprising:

5 an auxiliary power supply for supplying electrical power in the event of a power failure, wherein

 the detection section is a power-failure detecting section for detecting a power failure, and

 the control section switches power supply to the auxiliary
10 power supply if the power-failure detecting section detects a power failure.

10. The culture treatment apparatus according to claim 9, wherein, if the predetermined treatment has started when a power
15 failure is detected by the power-failure detecting section, the control section allows the predetermined treatment to be continued until the subsequent closing of the container for the automatic culture apparatus and stops the culture treatment apparatus.

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11. The culture treatment apparatus according to claim 9, further comprising an open/closed detecting section for detecting an open/closed state of the container for the automatic culture apparatus.

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12. The culture treatment apparatus according to claim 1 or 2, wherein the container for the automatic culture apparatus is at least one of a culture vessel containing cells, a reagent container, and a disposable-tip container.

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13. An automatic culture apparatus comprising:

the culture treatment apparatus according to claim 1 or

2;

an incubation chamber for accommodating the container
10 storing cells such that the container can be extracted and
inserted and for culturing the cells while maintaining
predetermined incubation conditions; and

a transfer mechanism for transferring the container
between the culture treatment apparatus and the incubation
15 chamber.